

# **INPATIENT QUALITY INDICATORS (IQI) PARAMETER ESTIMATES ICD-10-CM Version 2019**

**Prepared for:**

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**July 2019**

**AHRQ Quality Indicators™**  
**Inpatient Quality Indicators (IPI) Parameter Estimates**

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### Executive Summary

This document provides statistical parameters associated with Version 2019 ICD-10-CM/PCS of Agency for Healthcare Research and Quality (AHRQ) Quality Indicators™ (QI) Inpatient Quality Indicators (IQI). The parameter estimates derived for the AHRQ QI are based on analysis of the 2016 Agency for Healthcare Research and Quality's Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID).<sup>1</sup>

HCUP is a family of healthcare databases and related software tools and products developed through a Federal- State-Industry partnership.<sup>2</sup> HCUP includes the largest collection of longitudinal hospital care data in the United States, with all-payer, encounter-level information beginning in 1988. The SID contain all-payer, encounter-level information on inpatient discharges, including clinical and resource information typically found on a billing record, such as patient demographics, up to 30 *International Classification of Diseases, Tenth Revision, Clinical Modification/Procedural Classification System (ICD-10-CM/PCS)* diagnoses and procedures, length of stay (LOS), expected payer, admission and discharge dates and discharge disposition. In 2016, the HCUP databases represent more than 97 percent of all annual discharges in the U.S.<sup>3</sup> The analytic dataset used to generate the risk adjustment regression models in this document consists of the same hospital discharge records that comprise the reference population for Version 2019 of the AHRQ QI software. This reference population file was limited to community hospitals and excludes rehabilitation and long-term acute care (LTAC) hospitals. Information on the type of hospital was obtained by the American Hospital Association (AHA) Annual Survey of Hospitals. AHA defines community

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<sup>1</sup> Healthcare Cost and Utilization Project (HCUP) 2016 State Inpatient Databases (SID). Agency for Healthcare Research and Quality, Rockville, MD

<sup>2</sup> The AHRQ QI program would like to acknowledge the HCUP Partner organizations that participated in the HCUP SID: Alaska State Hospital and Nursing Home Association, Arizona Department of Health Services, Arkansas Department of Health, California Office of Statewide Health Planning and Development, Colorado Hospital Association, Connecticut Hospital Association, Delaware Division of Public Health, District of Columbia Hospital Association, Florida Agency for Health Care Administration, Georgia Hospital Association, Hawaii Health Information Corporation, Illinois Department of Public Health, Indiana Hospital Association, Iowa Hospital Association, Kansas Hospital Association, Kentucky Cabinet for Health and Family Services, Louisiana Department of Health and Hospitals, Maine Health Data Organization, Maryland Health Services Cost Review Commission, Massachusetts Center for Health Information and Analysis, Michigan Health & Hospital Association, Minnesota Hospital Association (provides data for Minnesota and North Dakota), Mississippi Department of Health, Missouri Hospital Industry Data Institute, Montana MHA - An Association of Montana Health Care Providers, Nebraska Hospital Association, Nevada Department of Health and Human Services, New Hampshire Department of Health & Human Services, New Jersey Department of Health, New Mexico Department of Health, New York State Department of Health, North Carolina Department of Health and Human Services, North Dakota (data provided by the Minnesota Hospital Association), Ohio Hospital Association, Oklahoma State Department of Health, Oregon Association of Hospitals and Health Systems, Oregon Office of Health Analytics, Pennsylvania Health Care Cost Containment Council, Rhode Island Department of Health, South Carolina Revenue and Fiscal Affairs Office, South Dakota Association of Healthcare Organizations, Tennessee Hospital Association, Texas Department of State Health Services, Utah Department of Health, Vermont Association of Hospitals and Health Systems, Virginia Health Information, Washington State Department of Health, West Virginia Health Care Authority, Wisconsin Department of Health Services, Wyoming Hospital Association

<sup>3</sup> The states included in the analysis are Alaska, Arkansas, Arizona, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Iowa, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maryland, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, North Carolina, Nebraska, New Jersey, New Mexico, Nevada, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Vermont, Washington, Wisconsin, West Virginia, and Wyoming.

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hospitals as “all non-Federal, short-term, general, and other specialty hospitals, excluding hospital units of institutions.” Included among community hospitals are specialty hospitals such as obstetrics-gynecology, ear-nose-throat, orthopedic, and pediatric institutions. Also included are public hospitals and academic medical centers.

In 2016, 45 of the SID include indicators of the diagnoses being present on admission (POA) and included the PRDAY data element. Discharges from these 45 participating States are used to develop hospital-level indicators. Edit checks on POA were developed during an HCUP evaluation of POA coding in the 2011 SID at hospitals that were required to report POA to CMS (<http://www.hcup-us.ahrq.gov/reports/methods/2015-06.pdf>). The edits identify general patterns of suspect reporting of POA. The edits do not evaluate whether a valid POA value (e.g., Y or N) is appropriate for the specific diagnosis. There are three hospital-level edit checks:

1. Indication that a hospital has POA reported as Y on all diagnoses on all discharges
2. Indication that a hospital has POA reported as missing on all non-Medicare discharges
3. Indication that a hospital reported POA as missing on all nonexempt diagnoses for 15 percent or more of discharges. The cut-point of 15 percent was determined by 2 times the standard deviation plus the mean of the percentage for hospitals that are required to report POA to CMS.

This document is devoted to listing covariates and coefficients for risk adjustment regression models. The regression coefficients are used to calculate risk-adjusted rates that account for differences in patient populations across hospitals. IQI 21, IQI 22, IQI 33, and IQI 34 are not risk adjusted, and thus are not presented in this document.

Covariates that are considered as potential risk adjusters for the hospital-level IQI include sex and age, Major Diagnostic Categories (MDC), 3M All-Payer Refined Diagnosis-Related Group (APR-DRGs)<sup>4</sup>, Risk of Mortality subclass categories, and whether they were transferred from another facility. Descriptions of some variable categories are provided in the Appendix tables at the end of the document. Every covariate in every model is a binary indicator variable, coded using 0 or 1. The AHRQ QI software user does not need to manipulate or adjust these coefficients; rather this document is intended to make it transparent to the user how the risk adjusted QI rates are calculated. In addition to the presentation of the covariates for the risk models, this document provides the weights used in the hospital-level composites (IQI 90 and IQI 91).

Additional information on the risk adjustment process and composite indicators may be found in Quality Indicator Empirical Methods, available on the AHRQ QI™ website.  
(<http://www.qualityindicators.ahrq.gov/modules/Default.aspx>)

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<sup>4</sup> Averill RF, Goldfield N, Hughes JS, Bonazelli J, McCullough EC, Steinbeck BA, Mullin R, Tang AM. All Patient Refined Diagnosis Related Groups (APR-DRGs). Version 20.0. Methodology Overview. Document number GRP-041. Wallingford, CT: 3M Health Information Systems; 2003. Product website: [http://www.3m.com/3M/en\\_US/company-us/all-3m-products/~/3M-APR-DRG-Software?N=5002385+3293081278&rt=rud](http://www.3m.com/3M/en_US/company-us/all-3m-products/~/3M-APR-DRG-Software?N=5002385+3293081278&rt=rud).

**Table 1. Risk Adjustment Coefficients for IQI 08 - Esophageal Resection Volume**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
Intercept	Intercept	1	-1.229050847	0.541356299	-2.270317812	0.0232
M_AgeCat_5	Male   Age < 50	1	-1.332855251	0.840636981	-1.585530116	0.1128
M_AgeCat_6	Male   Age < 55	1	0.627987407	0.540741716	1.161344481	0.2455
M_AgeCat_7	Male   Age < 60	1	-0.322753623	0.466482305	-0.691888244	0.489
M_AgeCat_8	Male   Age < 65	1	-0.330111756	0.616177278	-0.535741527	0.5921
M_AgeCat_9	Male   Age >= 65	1	-0.007596989	0.579510988	-0.013109309	0.9895
M_AgeCat_10	Male   Age >= 70	1	-0.14836844	0.321147565	-0.461994598	0.6441
M_AgeCat_11	Male   Age >= 75	1	0.514168469	0.348869218	1.473814374	0.1405
M_AgeCat_12	Male   Age >= 80	1	0.100994239	0.468032534	0.215784656	0.8292
F_AgeCat_5	Female   Age < 50	1	-0.069173544	1.406874673	-0.049168235	0.9608
F_AgeCat_6	Female   Age < 55	1	-0.63355801	1.150272332	-0.55078957	0.5818
F_AgeCat_7	Female   Age < 60	1	0.277227008	0.77294221	0.3586646	0.7198
F_AgeCat_8	Female   Age < 65	1	-0.40638247	0.79825705	-0.50908723	0.6107
F_AgeCat_10	Female   Age >= 70	1	-0.42754673	0.700861367	-0.61003039	0.5418
F_AgeCat_11	Female   Age >= 75	1	0.065103852	0.773115699	0.084209714	0.9329
F_AgeCat_12	Female   Age >= 80	1	0.927203306	0.786306979	1.179187431	0.2383
ADX220_0003	DRG Major stomach, esophageal & duodenal procedures	1	0.520393813	0.596689386	0.872135194	0.3831
ADX220_0004	DRG Major stomach, esophageal & duodenal procedures	1	3.978889715	0.426705057	9.324683758	<.0001

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
ADX220_1234	DRG Major stomach, esophageal & duodenal procedures	1	-4.33174983	0.441580697	-9.80964488	<.0001
TRNSFER	Transfer from Another Acute Care Hospital	1	0.418922358	0.507577757	0.82533632	0.4092

c-statistic=0.901

Please note the sex|age groups are open-ended and overlap. The effect for any sex|age group can be estimated by summing the coefficients for all applicable sex|age groups. Confidence intervals and p-values for sex|age groups cannot be estimated with this risk model. The sex| age reference group is women age 65 and 74 years.

**Table 2. Risk Adjustment Coefficients for IQI 09A - Pancreatic Resection Mortality: Stratum A: Presence Of Pancreatic Cancer**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
Intercept	Intercept	1	-2.595014228	0.377628153	-6.871877021	<.0001
M_AgeCat_5	Male   Age < 50	1	-0.898218591	1.147264176	-0.782922198	0.4337
M_AgeCat_6	Male   Age < 55	1	-0.513220196	0.691041586	-0.742676283	0.4577
M_AgeCat_7	Male   Age < 60	1	-0.163331013	0.46443181	-0.351679212	0.7251
M_AgeCat_8	Male   Age < 65	1	0.165767748	0.387379257	0.427921073	0.6687
M_AgeCat_9	Male   Age >= 65	1	0.145856301	0.360801639	0.404256205	0.686
M_AgeCat_10	Male   Age >= 70	1	0.156362179	0.30070463	0.51998594	0.6031
M_AgeCat_11	Male   Age >= 75	1	0.05580011	0.279122054	0.199912937	0.8415
M_AgeCat_12	Male   Age >= 80	1	0.234690043	0.319325173	0.734956287	0.4624
M_AgeCat_13	Male   Age >= 85	1	0.111657497	0.530868722	0.210329771	0.8334
F_AgeCat_6	Female   Age < 55	1	-1.15939804	0.578908073	-2.002732549	0.0452
F_AgeCat_7	Female   Age < 60	1	-0.406658664	0.414879936	-0.980183973	0.327
F_AgeCat_8	Female   Age < 65	1	0.794112693	0.352989718	2.249676552	0.0245
F_AgeCat_10	Female   Age >= 70	1	0.077693993	0.359272022	0.216253947	0.8288
F_AgeCat_11	Female   Age >= 75	1	-0.023157767	0.379040993	-0.061095678	0.9513
F_AgeCat_12	Female   Age >= 80	1	-0.36321441	0.431545707	-0.84165919	0.4
F_AgeCat_13	Female   Age >= 85	1	0.939489365	0.485996976	1.933117716	0.0532
MDC_6	MDC 6: Digestive System	1	-2.1007845	0.501149643	-4.19193056	<.0001
ADX220_0004	DRG Major stomach, esophageal &	1	3.380010053	0.522738668	6.465965227	<.0001

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
	duodenal procedures					
ADX260_0003	DRG Major pancreas, liver & shunt procedures	1	1.86891748	0.382399442	4.88734364	<.0001
ADX260_0004	DRG Major pancreas, liver & shunt procedures	1	4.683369096	0.338706773	13.82720827	<.0001
ADX260_1234	DRG Major pancreas, liver & shunt procedures	1	-4.0017201	0.442093327	-9.05175413	<.0001
TRNSFER	Transfer from Another Acute Care Hospital	1	0.619354319	0.282445965	2.192824101	0.0283

c-statistic=0.907

Please note the sex|age groups are open-ended and overlap. The effect for any sex|age group can be estimated by summing the coefficients for all applicable sex|age groups. Confidence intervals and p-values for sex|age groups cannot be estimated with this risk model. The sex| age reference group is women age 65 and 74 years.

**Table 3. Risk Adjustment Coefficients for IQI 09B - Pancreatic Resection Mortality: Stratum B: Absence Of Pancreatic Cancer**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
Intercept	Intercept	1	-4.671363688	0.418940855	-11.15041331	<.0001
M_AgeCat_1	Male   Age < 30	1	-0.669906469	0.480358412	-1.394597142	0.1631
M_AgeCat_2	Male   Age < 35	1	0.98905278	0.588616156	1.680301789	0.0929
M_AgeCat_3	Male   Age < 40	1	-0.734120432	0.639198549	-1.148501406	0.2508
M_AgeCat_4	Male   Age < 45	1	1.105944998	0.594723141	1.859596378	0.0629
M_AgeCat_5	Male   Age < 50	1	-0.593602797	0.58295528	-1.018264723	0.3086
M_AgeCat_6	Male   Age < 55	1	-0.551467389	0.397352475	-1.387854421	0.1652
M_AgeCat_7	Male   Age < 60	1	0.337094316	0.352125402	0.957313257	0.3384
M_AgeCat_8	Male   Age < 65	1	0.81095398	0.476028975	1.703581131	0.0885

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PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
M_AgeCat_9	Male   Age >= 65	1	1.033518175	0.476082784	2.170879122	0.0299
M_AgeCat_10	Male   Age >= 70	1	-0.090687563	0.348246519	-0.260411973	0.7945
M_AgeCat_11	Male   Age >= 75	1	0.26912842	0.359755821	0.748086355	0.4544
M_AgeCat_12	Male   Age >= 80	1	0.16629403	0.495254679	0.335774779	0.737
M_AgeCat_13	Male   Age >= 85	1	0.318571026	0.733991864	0.434025282	0.6643
F_AgeCat_1	Female   Age < 30	1	0.108896755	0.731892268	0.148787957	0.8817
F_AgeCat_2	Female   Age < 35	1	0.222291979	0.733474311	0.303067163	0.7618
F_AgeCat_3	Female   Age < 40	1	0.494002551	0.754134819	0.65505867	0.5124
F_AgeCat_4	Female   Age < 45	1	-0.680991144	0.577359881	-1.179491625	0.2382
F_AgeCat_5	Female   Age < 50	1	0.514551652	0.639641839	0.80443714	0.4211
F_AgeCat_6	Female   Age < 55	1	-0.519047617	0.577262653	-0.899153296	0.3686
F_AgeCat_7	Female   Age < 60	1	0.415695274	0.509298541	0.816211397	0.4144
F_AgeCat_8	Female   Age < 65	1	0.230766722	0.573521301	0.40236818	0.6874
F_AgeCat_10	Female   Age >= 70	1	0.482215442	0.535964829	0.899714713	0.3683
F_AgeCat_11	Female   Age >= 75	1	0.577102521	0.446007595	1.293929807	0.1957
F_AgeCat_12	Female   Age >= 80	1	-1.421945787	1.035035566	-1.373813456	0.1695
F_AgeCat_13	Female   Age >= 85	1	1.731872276	1.31711909	1.314894218	0.1885
MDC_5	MDC 5: Circulatory System	1	1.865621868	0.502558069	3.712251343	0.0002
MDC_6	MDC 6: Digestive System	1	-0.842546631	0.435987932	-1.93249989	0.0533
MDC_7	MDC 7: Hepatobiliary System And Pancreas	1	-1.633550223	0.332577214	-4.911792379	<.0001
MDC_8	MDC 8: Musculoskeletal And Connective	1	0.706093547	0.70077051	1.007595978	0.3136
MDC_10	MDC 10: Endocrine Nutritional And Metabolic	1	-1.070391857	0.911068014	-1.174875905	0.24
MDC_11	MDC 11: Kidney And Urinary Tract	1	1.356723374	0.545038057	2.489226866	0.0128
MDC_18	MDC 18: Infectious and Parasitic	1	1.414245871	0.770520681	1.835441808	0.0664

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
MDC_24	MDC 24: Multiple Significant Trauma	1	0.448756677	0.496044453	0.904670286	0.3656
ADX220_0002	DRG Major stomach, esophageal & duodenal procedures	1	-0.660030204	0.913923597	-0.722194072	0.4702
ADX220_0003	DRG Major stomach, esophageal & duodenal procedures	1	0.568270879	0.652813598	0.870494856	0.384
ADX220_0004	DRG Major stomach, esophageal & duodenal procedures	1	2.92146526	0.446307624	6.545855593	<.0001
ADX221_0003	DRG Major small & large bowel procedures	1	1.160742502	0.764422245	1.518457253	0.1289
ADX221_0004	DRG Major small & large bowel procedures	1	3.201223673	0.578665834	5.532076523	<.0001
ADX229_1234	DRG Other digestive system & abdominal procedures	1	0.245119453	0.587539983	0.417196209	0.6765
ADX260_0003	DRG Major pancreas, liver & shunt procedures	1	0.420580739	0.55808854	0.753609345	0.4511
ADX260_0004	DRG Major pancreas, liver & shunt procedures	1	3.311309567	0.311990707	10.61348781	<.0001
ADX317_1234	DRG Tendon, muscle & other soft tissue procedures	1	0.549290748	0.975838933	0.562890789	0.5735
ADX320_1234	DRG Other musculoskeletal system & connective tissue procedu	1	-0.168275134	0.963056231	-0.174730331	0.8613
ADX442_1234	DRG Kidney & urinary tract procedures for malignancy	1	-0.024853203	0.652639616	-0.038081052	0.9696
ADX650_1234	DRG Splenectomy	1	0.773858209	0.558031165	1.386765215	0.1655
ADX680_0003	DRG Major O.R. procedures for lymphatic/hematopoietic/other	1	0.107047453	0.513939999	0.208287841	0.835
ADX680_0004	DRG Major O.R. procedures for lymphatic/hematopoietic/other	1	1.922254298	0.364926108	5.26751651	<.0001
ADX710_0004	DRG Infectious & parasitic diseases including HIV w O.R. pro	1	1.835386638	1.117309562	1.642684087	0.1004

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
ADX710_1234	DRG Infectious & parasitic diseases including HIV w O.R. pro	1	-1.30100885	1.256281273	-1.035603155	0.3004
ADX911_0003	DRG Extensive abdominal/thoracic procedures for mult signifi	1	0.763569253	0.646494605	1.181091455	0.2376
ADX911_0004	DRG Extensive abdominal/thoracic procedures for mult signifi	1	2.287279149	0.406802721	5.622575832	<.0001
TRNSFER	Transfer from Another Acute Care Hospital	1	0.498774322	0.267775255	1.862660242	0.0625

c-statistic=0.866

Please note the sex|age groups are open-ended and overlap. The effect for any sex|age group can be estimated by summing the coefficients for all applicable sex|age groups. Confidence intervals and p-values for sex|age groups cannot be estimated with this risk model. The sex| age reference group is women age 65 and 74 years.

**Table 4. Risk Adjustment Coefficients for IQI 11A - AAA Repair Mortality: Stratum A: Open repair of ruptured AAA**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
Intercept	Intercept	1	0.595478825	0.515420436	-1.155326377	0.248
M_AgeCat_6	Male   Age < 55	1	0.191099142	0.413996521	-0.461596009	0.6444
M_AgeCat_7	Male   Age < 60	1	0.176009011	0.307338399	0.572687994	0.5669
M_AgeCat_8	Male   Age < 65	1	0.068135752	0.409683997	-0.166312944	0.8679
M_AgeCat_9	Male   Age >= 65	1	0.100019639	0.408761788	0.244689307	0.8067
M_AgeCat_10	Male   Age >= 70	1	0.246943818	0.2230212	1.107266117	0.2682

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PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
M_AgeCat_11	Male   Age >= 75	1	0.322163813	0.218281265	1.475911426	0.14
M_AgeCat_12	Male   Age >= 80	1	0.350055047	0.243367925	1.438377907	0.1503
M_AgeCat_13	Male   Age >= 85	1	0.180142727	0.315331383	0.571280682	0.5678
F_AgeCat_8	Female   Age < 65	1	0.420387002	0.492927151	0.852837994	0.3937
F_AgeCat_10	Female   Age >= 70	1	0.749309257	0.450610801	1.662874604	0.0963
F_AgeCat_11	Female   Age >= 75	1	-0.26736069	0.338568091	-0.78968071	0.4297
F_AgeCat_12	Female   Age >= 80	1	0.563010757	0.372652526	1.510819647	0.1308
F_AgeCat_13	Female   Age >= 85	1	0.280403113	0.396266069	0.707613231	0.4792
MDC_5	MDC 5: Circulatory System	1	0.486242234	0.406264123	-1.196862355	0.2314
ADX167_0004	DRG Other cardiothoracic & thoracic vascular procedures	1	0.092268724	0.454595494	-0.202968849	0.8392
ADX169_0004	DRG Major abdominal vascular procedures	1	0.017568203	0.232802841	-0.075463867	0.9398
ADX181_0004	DRG Lower extremity arterial procedures #	1	1.344258481	0.600599898	2.238192988	0.0252
ADX181_1234	DRG Lower extremity arterial procedures #	1	-0.87359451	0.595390172	-1.467263908	0.1423
ADX182_1234	DRG Other peripheral vascular procedures #	1	0.124964356	0.242963443	0.514333986	0.607

c-statistic=0.629

Please note the sex|age groups are open-ended and overlap. The effect for any sex|age group can be estimated by summing the coefficients for all applicable sex|age groups. Confidence intervals and p-values for sex|age groups cannot be estimated with this risk model. The sex| age reference group is women age 65 and 74 years.

**Table 5. Risk Adjustment Coefficients for IQI 11B - AAA Repair Mortality: Stratum B: Open repair of unruptured AAA**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
Intercept	Intercept	1	2.318446614	0.459195871	-5.048927394	<.0001
M_AgeCat_6	Male   Age < 55	1	0.516981302	0.507596067	-1.018489574	0.3084
M_AgeCat_7	Male   Age < 60	1	0.685203282	0.381702577	1.79512354	0.0726
M_AgeCat_8	Male   Age < 65	1	-0.3442579	0.385084654	-0.893979795	0.3713
M_AgeCat_9	Male   Age >= 65	1	0.554107504	0.354635269	-1.562471511	0.1182
M_AgeCat_10	Male   Age >= 70	1	0.258383045	0.276956451	0.932937449	0.3509
M_AgeCat_11	Male   Age >= 75	1	0.612339207	0.225509974	2.715353104	0.0066
M_AgeCat_12	Male   Age >= 80	1	0.139792001	0.255749635	0.546597069	0.5847
M_AgeCat_13	Male   Age >= 85	1	0.311937861	0.383200111	0.814033849	0.4156
F_AgeCat_6	Female   Age < 55	1	0.582391653	0.876434334	0.664501185	0.5064
F_AgeCat_7	Female   Age < 60	1	0.482955682	0.779608235	-0.619485096	0.5356
F_AgeCat_8	Female   Age < 65	1	0.081438721	0.496619289	0.163986222	0.8697
F_AgeCat_10	Female   Age >= 70	1	0.199421389	0.345347163	0.57745194	0.5636
F_AgeCat_11	Female   Age >= 75	1	0.185624599	0.35460601	-0.523467154	0.6006
F_AgeCat_12	Female   Age >= 80	1	0.480119203	0.421448413	1.13921227	0.2546
F_AgeCat_13	Female   Age >= 85	1	0.449519519	0.606232333	-0.741497104	0.4584
MDC_5	MDC 5: Circulatory System	1	-0.6780355	0.429149796	-1.579950651	0.1141
ADX167_0004	DRG Other cardiothoracic & thoracic vascular procedures	1	1.861131243	0.400678072	4.644954079	<.0001
ADX169_0002	DRG Major abdominal	1	-	0.559728906	-0.900340612	0.3679

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
	vascular procedures		0.503946665			
ADX169_0003	DRG Major abdominal vascular procedures	1	0.845422294	0.454623153	1.859611171	0.0629
ADX169_0004	DRG Major abdominal vascular procedures	1	2.990142004	0.415289404	7.200140377	<.0001
ADX169_1234	DRG Major abdominal vascular procedures	1	-1.529290599	0.447294127	-3.41898207	0.0006
ADX181_0004	DRG Lower extremity arterial procedures #	1	1.629819495	0.377744594	4.314607068	<.0001
ADX182_0004	DRG Other peripheral vascular procedures #	1	3.111586017	0.444666909	6.997565934	<.0001
ADX182_1234	DRG Other peripheral vascular procedures #	1	-1.71523878	0.422981821	-4.055112292	<.0001
TRNSFER	Transfer from Another Acute Care Hospital	1	0.676488442	0.193444899	3.497060125	0.0005

c-statistic=0.844

Please note the sex|age groups are open-ended and overlap. The effect for any sex|age group can be estimated by summing the coefficients for all applicable sex|age groups. Confidence intervals and p-values for sex|age groups cannot be estimated with this risk model. The sex| age reference group is women age 65 and 74 years.

**Table 6. Risk Adjustment Coefficients for IQI 11C - AAA Repair Mortality: Stratum C: Endovascular repair of ruptured AAA**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
Intercept	Intercept	1	-1.679836531	0.543132249	-3.092868329	0.002
M_AgeCat_6	Male   Age < 55	1	-0.065489751	0.568687263	-0.115159518	0.9083
M_AgeCat_7	Male   Age < 60	1	-0.085706627	0.382414325	-0.224119814	0.8227

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
M_AgeCat_8	Male   Age < 65	1	0.459580699	0.504578087	0.910821756	0.3624
M_AgeCat_9	Male   Age >= 65	1	0.744726994	0.488392577	1.52485322	0.1273
M_AgeCat_10	Male   Age >= 70	1	0.181533873	0.245026165	0.740875464	0.4588
M_AgeCat_11	Male   Age >= 75	1	0.099183137	0.218622829	0.453672372	0.6501
M_AgeCat_12	Male   Age >= 80	1	0.324790328	0.228778005	1.419674624	0.1557
M_AgeCat_13	Male   Age >= 85	1	0.321576726	0.270187171	1.190199834	0.234
M_AgeCat_14	Male   Age >= 90	1	0.714056207	0.344840238	2.070687027	0.0384
F_AgeCat_8	Female   Age < 65	1	0.539241174	0.580657836	0.928672862	0.3531
F_AgeCat_10	Female   Age >= 70	1	0.692793908	0.542517437	1.276998415	0.2016
F_AgeCat_11	Female   Age >= 75	1	0.583258386	0.378955324	1.539121762	0.1238
F_AgeCat_12	Female   Age >= 80	1	0.394776322	0.363296347	1.086650953	0.2772
F_AgeCat_13	Female   Age >= 85	1	0.348417289	0.404103144	0.862198908	0.3886
F_AgeCat_14	Female   Age >= 90	1	0.558798049	0.586116305	0.953391066	0.3404
MDC_5	MDC 5: Circulatory System	1	-0.198425853	0.342014551	0.580167867	0.5618
ADX181_0002	DRG Lower extremity arterial procedures #	1	0.379499382	0.666447086	0.569436629	0.5691
ADX181_0003	DRG Lower extremity arterial procedures #	1	0.672994757	0.507235389	1.326789833	0.1846
ADX181_0004	DRG Lower extremity arterial procedures #	1	2.090288442	0.438212662	4.770032053	<.0001
ADX181_1234	DRG Lower extremity arterial procedures #	1	1.499177516	0.455778332	3.289268953	0.001

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
ADX182_0003	DRG Other peripheral vascular procedures #	1	1.808298823	-0.377655261	-4.788226222	<.0001
ADX182_0004	DRG Other peripheral vascular procedures #	1	-0.088988955	0.190920667	-0.46610436	0.6411
TRNSFER	Transfer from Another Acute Care Hospital	1	0.065081217	0.124693052	0.521931383	0.6017

c-statistic=0.685

Please note the sex|age groups are open-ended and overlap. The effect for any sex|age group can be estimated by summing the coefficients for all applicable sex|age groups. Confidence intervals and p-values for sex|age groups cannot be estimated with this risk model. The sex| age reference group is women age 65 and 74 years.

**Table 7. Risk Adjustment Coefficients for IQI 11D - AAA Repair Mortality: Stratum D: (Endovascular repair of unruptured AAA)**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS	
Intercept	Intercept	1	-	3.623820668	0.510577082	-7.09749966	<.0001
M_AgeCat_6	Male   Age < 55	1	2.109134476	1.245303531	1.693671	0.0903	
M_AgeCat_7	Male   Age < 60	1	-	0.491121746	1.207009487	-0.406891372	0.6841
M_AgeCat_8	Male   Age < 65	1	-	0.373085699	0.662050549	-0.563530533	0.5731
M_AgeCat_9	Male   Age >= 65	1	-	0.743261101	0.455342987	1.632310416	0.1026
M_AgeCat_10	Male   Age >= 70	1	-	0.565948297	0.309399919	-1.829180495	0.0674
M_AgeCat_11	Male   Age >= 75	1	-	0.154775284	0.29532166	-0.524090524	0.6002
M_AgeCat_12	Male   Age >= 80	1	-	0.48852457	0.295525473	1.653070935	0.0983
M_AgeCat_13	Male   Age >= 85	1	-	0.015495825	0.30572233	-0.050685945	0.9596
M_AgeCat_14	Male   Age >= 90	1	-	0.810680714	0.441740561	1.835196461	0.0665
F_AgeCat_10	Female   Age >= 70	1	-	-0.09274921	0.579869596	-0.159948393	0.8729
F_AgeCat_11	Female   Age >= 75	1	-	0.753879165	0.485255882	1.553570382	0.1203
F_AgeCat_12	Female   Age >= 80	1	-	0.180851771	0.388037912	0.466067272	0.6412
F_AgeCat_13	Female   Age >= 85	1	-	0.331786124	0.423086542	0.784203919	0.4329
F_AgeCat_14	Female   Age >= 90	1	-	0.046527842	0.642390153	-0.072429258	0.9423
MDC_5	MDC 5: Circulatory System	1	-	3.729695596	0.438086856	-8.513598499	<.0001

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
MDC_6	MDC 6: Digestive System	1	0.373160591	0.613475992	0.608272525	0.543
MDC_18	MDC 18: Infectious and Parasitic	1	-0.786927885	1.047046086	-0.751569483	0.4523
ADX167_1234	DRG Other cardiothoracic & thoracic vascular procedures	1	3.616534473	1.043276123	3.466517053	0.0005
ADX169_0002	DRG Major abdominal vascular procedures	1	1.72151651	0.756275013	2.276310178	0.0228
ADX169_0003	DRG Major abdominal vascular procedures	1	3.16130414	0.549997797	5.747848734	<.0001
ADX169_0004	DRG Major abdominal vascular procedures	1	6.188662795	0.377161388	16.40852696	<.0001
ADX175_1234	DRG Percutaneous coronary intervention w/o AMI	1	3.643812951	0.528100284	6.899850393	<.0001
ADX181_0003	DRG Lower extremity arterial procedures #	1	2.822158863	0.381308266	7.401252787	<.0001
ADX181_0004	DRG Lower extremity arterial procedures #	1	5.491657167	0.320366505	17.14179565	<.0001
ADX182_0002	DRG Other peripheral vascular procedures #	1	-1.889098072	1.076297683	-1.75518177	0.0792
ADX182_0003	DRG Other peripheral vascular procedures #	1	1.450476059	0.48159867	3.011794156	0.0026
ADX182_0004	DRG Other peripheral vascular procedures #	1	5.183089638	0.319529529	16.2210036	<.0001

c-statistic=0.947

Please note the sex|age groups are open-ended and overlap. The effect for any sex|age group can be estimated by summing the coefficients for all applicable sex|age groups. Confidence intervals and p-values for sex|age groups cannot be estimated with this risk model. The sex| age reference group is women age 65 and 74 years.

**Table 8. Risk Adjustment Coefficients for IQI 12 - CABG Mortality**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
Intercept	Intercept	1	2.422570601	0.126266229	-19.18621166	<.0001
M_AgeCat_4	Male   Age < 45	1	0.072328966	0.2092787	0.345610738	0.7296
M_AgeCat_5	Male   Age < 50	1	0.043736746	0.155505074	-0.281256071	0.7785
M_AgeCat_6	Male   Age < 55	1	0.035469558	0.110260854	-0.321687676	0.7477
M_AgeCat_7	Male   Age < 60	1	-0.09471215	0.086422615	-1.095918592	0.2731
M_AgeCat_8	Male   Age < 65	1	0.484578397	0.079867713	-6.067262717	<.0001
M_AgeCat_9	Male   Age >= 65	1	0.576345925	0.072711016	-7.926528316	<.0001
M_AgeCat_10	Male   Age >= 70	1	0.144342429	0.062329825	2.315784303	0.0206
M_AgeCat_11	Male   Age >= 75	1	0.145577134	0.063882701	2.278819329	0.0227
M_AgeCat_12	Male   Age >= 80	1	0.230088844	0.070684887	3.255134913	0.0011
M_AgeCat_13	Male   Age >= 85	1	0.075818253	0.10487867	0.722913947	0.4697
M_AgeCat_14	Male   Age >= 90	1	0.100276255	0.362525558	-0.27660465	0.7821
F_AgeCat_4	Female   Age < 45	1	0.274717484	0.358652294	-0.765971634	0.4437
F_AgeCat_5	Female   Age < 50	1	0.036478781	0.216546424	-0.16845709	0.8662
F_AgeCat_6	Female   Age < 55	1	0.020343287	0.166633881	-0.122083737	0.9028

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PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS	
F_AgeCat_7	Female   Age < 60	1	-0.24633672	0.118044427	-2.086813632	0.0369	
F_AgeCat_8	Female   Age < 65	1	-	0.094901626	-0.384540867	0.7006	
F_AgeCat_10	Female   Age >= 70	1	0.062542844	0.079298404	-0.788702429	0.4303	
F_AgeCat_11	Female   Age >= 75	1	0.062119628	0.08405246	0.739057814	0.4599	
F_AgeCat_12	Female   Age >= 80	1	0.286422689	0.095022653	3.014256921	0.0026	
F_AgeCat_13	Female   Age >= 85	1	0.446000724	0.135416307	3.293552566	0.001	
F_AgeCat_14	Female   Age >= 90	1	0.265131448	0.376133998	0.704885625	0.4809	
MDC_5	MDC 5: Circulatory System	1	1.092967656	0.136681344	7.99646554	<.0001	
ADX161_0004	DRG Cardiac defibrillator & heart assist implant	1	0.167203284	0.13430725	1.244931185	0.2132	
ADX162_0002	DRG Cardiac valve procedures w AMI or complex PDX	1	-	0.430844964	-7.815457595	<.0001	
ADX162_0004	DRG Cardiac valve procedures w AMI or complex PDX	1	3.367250547	0.092415213	0.495978251	0.6199	
ADX163_0002	DRG Cardiac valve procedures w/o AMI or complex PDX	1	-	4.284788368	0.202835745	<.0001	
ADX163_0003	DRG Cardiac valve procedures w/o AMI or complex PDX	1	-	2.850437576	0.127060583	<.0001	
ADX163_0004	DRG Cardiac valve procedures w/o AMI or complex PDX	1	-	-0.41407702	0.084250977	-22.43368883	<.0001
ADX165_0002	DRG Coronary bypass w AMI or complex PDX	1	-	1.738087048	0.42125511	-4.914803808	<.0001
ADX165_0003	DRG Coronary bypass w AMI or complex PDX	1	-	0.279299925	0.410306822	-4.125972618	<.0001
ADX165_0004	DRG Coronary bypass w AMI or complex PDX	1	-	1.922662592	0.404267384	0.4961	

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
ADX165_1234	DRG Coronary bypass w AMI or complex PDX	1	-2.488261041	0.403312575	-6.169559775	<.0001
ADX166_0003	DRG Coronary bypass w/o AMI or complex PDX	1	1.435902178	0.133529922	10.75341138	<.0001
ADX166_0004	DRG Coronary bypass w/o AMI or complex PDX	1	4.126965498	0.120811693	34.16031498	<.0001
ADX166_1234	DRG Coronary bypass w/o AMI or complex PDX	1	-4.939452393	0.135587014	-36.43012899	<.0001
ADX710_0004	DRG Infectious & parasitic diseases including HIV w O.R. pro	1	0.333310329	0.218919501	1.522524615	0.1279

c-statistic=0.893

Please note the sex|age groups are open-ended and overlap. The effect for any sex|age group can be estimated by summing the coefficients for all applicable sex|age groups. Confidence intervals and p-values for sex|age groups cannot be estimated with this risk model. The sex| age reference group is women age 65 and 74 years.

**Table 11. Risk Adjustment Coefficients for IQI 15 - AMI Mortality**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
Intercept	Intercept	1	-4.548136819	0.046868379	-97.04062582	<.0001
M_AgeCat_1	Male   Age < 30	1	-0.215689636	0.281165378	-0.767127298	0.443
M_AgeCat_2	Male   Age < 35	1	0.113651582	0.196021804	0.57979051	0.5621
M_AgeCat_3	Male   Age < 40	1	0.014522482	0.132071211	0.109959483	0.9124
M_AgeCat_4	Male   Age < 45	1	-0.252547458	0.091979645	-2.745688545	0.006
M_AgeCat_5	Male   Age < 50	1	0.012901204	0.061652653	0.20925627	0.8342
M_AgeCat_6	Male   Age < 55	1	-0.182622772	0.046184529	-3.954197983	<.0001
M_AgeCat_7	Male   Age < 60	1	-0.094247558	0.038172469	-2.468993008	0.0135
M_AgeCat_8	Male   Age < 65	1	0.06417191	0.039915809	1.607681556	0.1079
M_AgeCat_9	Male   Age >= 65	1	0.106481724	0.039035463	2.727820204	0.0064
M_AgeCat_10	Male   Age >= 70	1	0.119704132	0.032485879	3.68480511	0.0002
M_AgeCat_11	Male   Age >= 75	1	0.067004458	0.033502872	1.999961654	0.0455
M_AgeCat_12	Male   Age >= 80	1	0.020131451	0.034566172	0.582403254	0.5603
M_AgeCat_13	Male   Age >= 85	1	0.202220971	0.036467565	5.545228253	<.0001
M_AgeCat_14	Male   Age >= 90	1	0.187876067	0.040953067	4.587594591	<.0001
F_AgeCat_1	Female   Age < 30	1	-1.255498575	0.577011461	-2.17586419	0.0296
F_AgeCat_2	Female   Age < 35	1	-0.183332939	0.231205137	-0.792944918	0.4278
F_AgeCat_3	Female   Age < 40	1	0.257599913	0.176184299	1.462104823	0.1437
F_AgeCat_4	Female   Age < 45	1	0.001749347	0.124651188	0.014033934	0.9888
F_AgeCat_5	Female   Age < 50	1	0.046361173	0.095826418	0.48380367	0.6285

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PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
F_AgeCat_6	Female   Age < 55	1	-0.194734616	0.074604171	-2.610237634	0.009
F_AgeCat_7	Female   Age < 60	1	-0.105751308	0.056708854	-1.864811245	0.0622
F_AgeCat_8	Female   Age < 65	1	-0.013893541	0.048411817	-0.286986564	0.7741
F_AgeCat_10	Female   Age >= 70	1	0.072747549	0.043642127	1.666911191	0.0955
F_AgeCat_11	Female   Age >= 75	1	0.081488277	0.040732727	2.000560292	0.0454
F_AgeCat_12	Female   Age >= 80	1	0.114891614	0.038423308	2.990154188	0.0028
F_AgeCat_13	Female   Age >= 85	1	0.137391231	0.036572006	3.756732153	0.0002
F_AgeCat_14	Female   Age >= 90	1	0.181482191	0.037592555	4.827609961	<.0001
ADX161_0004	DRG Cardiac defibrillator & heart assist implant	1	3.181635359	0.069175722	45.99352614	<.0001
ADX162_0004	DRG Cardiac valve procedures w AMI or complex PDX	1	2.763948551	0.089270141	30.9616242	<.0001
ADX165_0002	DRG Coronary bypass w AMI or complex PDX	1	-1.501611236	0.13551014	-11.0811725	<.0001
ADX165_0004	DRG Coronary bypass w AMI or complex PDX	1	2.227794644	0.053424191	41.70010983	<.0001
ADX167_0004	DRG Other cardiothoracic & thoracic vascular procedures	1	2.713056098	0.213874318	12.6852823	<.0001
ADX167_1234	DRG Other cardiothoracic & thoracic vascular procedures	1	1.148848667	0.197175862	5.826517803	<.0001
ADX169_0004	DRG Major abdominal vascular procedures	1	2.193505799	0.115549292	18.98329068	<.0001
ADX169_1234	DRG Major abdominal vascular procedures	1	2.23075259	0.110948504	20.106198	<.0001
ADX174_0002	DRG Percutaneous coronary intervention w AMI	1	-1.17190782	0.069556944	-16.84817875	<.0001
ADX174_0003	DRG Percutaneous coronary intervention w AMI	1	0.450811746	0.054093071	8.334001722	<.0001

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PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
ADX174_0004	DRG Percutaneous coronary intervention w AMI	1	3.086878791	0.040203013	76.7822756	<.0001
ADX181_0004	DRG Lower extremity arterial procedures #	1	2.787581804	0.249035959	11.19349117	<.0001
ADX181_1234	DRG Lower extremity arterial procedures #	1	1.779925839	0.233676379	7.617055027	<.0001
ADX182_0004	DRG Other peripheral vascular procedures #	1	2.998645191	0.22695538	13.21248781	<.0001
ADX182_1234	DRG Other peripheral vascular procedures #	1	1.614525401	0.212023442	7.614843848	<.0001
ADX190_0002	DRG Acute myocardial infarction	1	-0.137596101	0.057392838	-2.39744376	0.0165
ADX190_0003	DRG Acute myocardial infarction	1	1.323709356	0.041582085	31.83364594	<.0001
ADX190_0004	DRG Acute myocardial infarction	1	3.447489676	0.03873808	88.99485096	<.0001

c-statistic=0.878

Please note the sex|age groups are open-ended and overlap. The effect for any sex|age group can be estimated by summing the coefficients for all applicable sex|age groups. Confidence intervals and p-values for sex|age groups cannot be estimated with this risk model. The sex| age reference group is women age 65 and 74 years.

**Table 12. Risk Adjustment Coefficients for IQI 16 - Congestive Heart Failure (CHF) Morality**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
Intercept	Intercept	1	-4.180914043	0.041285328	-101.2687609	<.0001
M_AgeCat_1	Male   Age < 30	1	0.41548166	0.166898805	2.489422615	0.0128
M_AgeCat_2	Male   Age < 35	1	0.187322122	0.159038283	1.177842961	0.2389
M_AgeCat_3	Male   Age < 40	1	0.048394031	0.135735318	0.356532341	0.7214
M_AgeCat_4	Male   Age < 45	1	-0.055168545	0.10523551	-0.524238871	0.6001
M_AgeCat_5	Male   Age < 50	1	-0.080337464	0.07854481	-1.022823334	0.3064
M_AgeCat_6	Male   Age < 55	1	-0.164903503	0.061495554	-2.681551641	0.0073
M_AgeCat_7	Male   Age < 60	1	-0.239523451	0.048662187	-4.922167808	<.0001
M_AgeCat_8	Male   Age < 65	1	0.217883483	0.04437533	4.910013873	<.0001
M_AgeCat_9	Male   Age >= 65	1	0.184710139	0.040677336	4.540861259	<.0001
M_AgeCat_10	Male   Age >= 70	1	0.024249345	0.034591574	0.701018837	0.4833
M_AgeCat_11	Male   Age >= 75	1	0.24163584	0.032551043	7.423290363	<.0001
M_AgeCat_12	Male   Age >= 80	1	0.125673856	0.029615468	4.243520867	<.0001
M_AgeCat_13	Male   Age >= 85	1	0.161624895	0.028728142	5.626012739	<.0001
M_AgeCat_14	Male   Age >= 90	1	0.160945086	0.029405504	5.473297987	<.0001
F_AgeCat_1	Female   Age < 30	1	0.427005698	0.266581828	1.601780964	0.1092
F_AgeCat_2	Female   Age < 35	1	-0.384354065	0.242713284	-1.583572429	0.1133
F_AgeCat_3	Female   Age < 40	1	0.498041748	0.189216961	2.632120004	0.0085
F_AgeCat_4	Female   Age < 45	1	-0.376334405	0.154684009	-2.432923797	0.015

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PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
F_AgeCat_5	Female   Age < 50	1	-0.001959905	0.100371633	-0.019526484	0.9844
F_AgeCat_6	Female   Age < 55	1	-0.230640071	0.080648924	-2.859803447	0.0042
F_AgeCat_7	Female   Age < 60	1	-0.146042549	0.060766259	-2.403349359	0.0162
F_AgeCat_8	Female   Age < 65	1	0.116955353	0.050141474	2.332507281	0.0197
F_AgeCat_10	Female   Age >= 70	1	0.06224868	0.042703026	1.457711236	0.1449
F_AgeCat_11	Female   Age >= 75	1	0.175183755	0.036503629	4.799077766	<.0001
F_AgeCat_12	Female   Age >= 80	1	0.02175263	0.032345804	0.672502376	0.5013
F_AgeCat_13	Female   Age >= 85	1	0.293434985	0.029137796	10.07059646	<.0001
F_AgeCat_14	Female   Age >= 90	1	0.237450806	0.026555384	8.941720019	<.0001
ADX169_0004	DRG Major abdominal vascular procedures	1	3.729853414	0.113419186	32.88555971	<.0001
ADX175_0004	DRG Percutaneous coronary intervention w/o AMI	1	1.560661227	0.063478275	24.58575365	<.0001
ADX181_0004	DRG Lower extremity arterial procedures #	1	3.309265214	0.105229717	31.44801019	<.0001
ADX182_0004	DRG Other peripheral vascular procedures #	1	2.610377169	0.140588272	18.56753157	<.0001
ADX182_1234	DRG Other peripheral vascular procedures #	1	0.442068813	0.131843337	3.352985636	0.0008
ADX192_0002	DRG Cardiac catheterization for other non-coronary condition	1	-1.999311253	0.216159678	-9.249233134	<.0001
ADX192_0004	DRG Cardiac catheterization for other non-coronary condition	1	2.737029986	0.074713264	36.63378976	<.0001
ADX192_1234	DRG Cardiac catheterization for other non-coronary condition	1	-1.126225516	0.071065625	-15.84768335	<.0001
ADX194_0002	DRG Heart failure	1	-1.288838775	0.041760052	-30.86295904	<.0001

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
ADX194_0003	DRG Heart failure	1	-0.106965023	0.031470407	-3.398908147	0.0007
ADX194_0004	DRG Heart failure	1	1.664822148	0.030462749	54.65108105	<.0001
TRNSFER	Transfer from Another Acute Care Hospital	1	0.711072778	0.031177549	22.80720591	<.0001

c-statistic=0.812

Please note the sex|age groups are open-ended and overlap. The effect for any sex|age group can be estimated by summing the coefficients for all applicable sex|age groups. Confidence intervals and p-values for sex|age groups cannot be estimated with this risk model. The sex| age reference group is women age 65 and 74 years.

**Table 13. Risk Adjustment Coefficients for IQI 17A - Acute Stroke Mortality: Stratum A: Subarachnoid hemorrhage**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
Intercept	Intercept	1	-2.213740836	0.092691254	-23.88295284	<.0001
M_AgeCat_1	Male   Age < 30	1	-0.095690061	0.268593797	-0.35626311	0.7216
M_AgeCat_2	Male   Age < 35	1	-0.686713179	0.252956252	-2.714750766	0.0066
M_AgeCat_3	Male   Age < 40	1	0.433881768	0.18726657	2.316920571	0.0205
M_AgeCat_4	Male   Age < 45	1	0.025060263	0.168700764	0.148548603	0.8819
M_AgeCat_5	Male   Age < 50	1	-0.163855739	0.135300936	-1.211046607	0.2259
M_AgeCat_6	Male   Age < 55	1	0.197461591	0.124787644	1.582380946	0.1136
M_AgeCat_7	Male   Age < 60	1	-0.11248665	0.128970346	-0.872190035	0.3831
M_AgeCat_8	Male   Age < 65	1	-0.087426011	0.120133325	-0.72774154	0.4668
M_AgeCat_9	Male   Age >= 65	1	0.033772649	0.114710505	0.294416362	0.7684
M_AgeCat_10	Male   Age >= 70	1	0.116977457	0.141669529	0.825706542	0.409
M_AgeCat_11	Male   Age >= 75	1	-0.313367619	0.163964141	-1.911196056	0.056
M_AgeCat_12	Male   Age >= 80	1	0.348589484	0.176927943	1.9702342	0.0488
M_AgeCat_13	Male   Age >= 85	1	0.152318229	0.204728283	0.744001888	0.4569
M_AgeCat_14	Male   Age >= 90	1	0.31722966	0.303454198	1.045395523	0.2958
F_AgeCat_1	Female   Age < 30	1	-0.212945936	0.238216737	-0.893916773	0.3714
F_AgeCat_2	Female   Age < 35	1	-0.125162206	0.211401558	-0.592059051	0.5538
F_AgeCat_3	Female   Age < 40	1	0.123087974	0.173331444	0.710130669	0.4776

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PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
F_AgeCat_4	Female   Age < 45	1	-0.04698198	0.126118641	-0.372522095	0.7095
F_AgeCat_5	Female   Age < 50	1	0.108678506	0.11084444	0.980459699	0.3269
F_AgeCat_6	Female   Age < 55	1	-0.129555537	0.103852208	-1.247499105	0.2122
F_AgeCat_7	Female   Age < 60	1	-0.036549759	0.096930771	-0.377070755	0.7061
F_AgeCat_8	Female   Age < 65	1	-0.038875042	0.105067658	-0.370000079	0.7114
F_AgeCat_10	Female   Age >= 70	1	0.056714269	0.111434706	0.508946183	0.6108
F_AgeCat_11	Female   Age >= 75	1	0.151128198	0.113395897	1.332748384	0.1826
F_AgeCat_12	Female   Age >= 80	1	0.195274716	0.122243535	1.597423659	0.1102
F_AgeCat_13	Female   Age >= 85	1	0.273791034	0.150446705	1.819853971	0.0688
F_AgeCat_14	Female   Age >= 90	1	0.103409353	0.206304874	0.501245321	0.6162
ADX021_0003	DRG Craniotomy except for trauma	1	1.674008084	0.207143769	8.081382745	<.0001
ADX021_0004	DRG Craniotomy except for trauma	1	3.829621923	0.196218864	19.51709351	<.0001
ADX021_1234	DRG Craniotomy except for trauma	1	-1.840496572	0.200147526	-9.195699853	<.0001
ADX022_0004	DRG Ventricular shunt procedures	1	0.78298606	0.204488495	3.828998109	0.0001
ADX024_0004	DRG Extracranial vascular procedures	1	3.714666698	0.194948981	19.0545582	<.0001
ADX024_1234	DRG Extracranial vascular procedures	1	-2.351709185	0.173954211	-13.51912765	<.0001
ADX044_0002	DRG Intracranial hemorrhage	1	-1.298460682	0.118530468	-10.95465748	<.0001
ADX044_0004	DRG Intracranial hemorrhage	1	2.953184358	0.063762156	46.31562872	<.0001

c-statistic=0.878

Please note the sex|age groups are open-ended and overlap. The effect for any sex|age group can be estimated by summing the coefficients for all applicable sex|age groups. Confidence intervals and p-values for sex|age groups cannot be estimated with this risk model. The sex| age reference group is women age 65 and 74 years.

**Table 14. Risk Adjustment Coefficients for IQI 17B - Acute Stroke Mortality: Stratum B: Intracerebral hemorrhage**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR>CHI-SQUARE
Intercept	Intercept	1	-2.468002871	0.050161161	2420.784706	<.0001
M_AgeCat_1	Male   Age < 30	1	-0.344407886	0.188559947	3.336163119	0.0678
M_AgeCat_2	Male   Age < 35	1	0.068490401	0.166945884	0.16830925	0.6816
M_AgeCat_3	Male   Age < 40	1	-0.09633185	0.127710293	0.568968205	0.4507
M_AgeCat_4	Male   Age < 45	1	-0.016255086	0.098888261	0.027020231	0.8694
M_AgeCat_5	Male   Age < 50	1	-0.022656244	0.077524828	0.085407144	0.7701
M_AgeCat_6	Male   Age < 55	1	-0.073701803	0.065445666	1.268219561	0.2601
M_AgeCat_7	Male   Age < 60	1	-0.036076093	0.058617042	0.378783628	0.5383
M_AgeCat_8	Male   Age < 65	1	-0.021055278	0.060299751	0.121924479	0.727
M_AgeCat_9	Male   Age >= 65	1	-0.137841091	0.059750786	5.321942298	0.0211
M_AgeCat_10	Male   Age >= 70	1	0.067641255	0.054344132	1.549237499	0.2132
M_AgeCat_11	Male   Age >= 75	1	0.026015795	0.05345504	0.236862816	0.6265
M_AgeCat_12	Male   Age >= 80	1	0.274013166	0.053491241	26.24082715	<.0001
M_AgeCat_13	Male   Age >= 85	1	0.094036312	0.058150443	2.615080852	0.1059
M_AgeCat_14	Male   Age >= 90	1	0.077497597	0.075622159	1.050215262	0.3055
F_AgeCat_1	Female   Age < 30	1	-1.003972094	0.233400761	18.50285504	<.0001
F_AgeCat_2	Female   Age < 35	1	0.295189406	0.19806593	2.221170929	0.1361
F_AgeCat_3	Female   Age < 40	1	-0.179032985	0.15942371	1.261131238	0.2614
F_AgeCat_4	Female   Age < 45	1	0.092728122	0.125158495	0.548911424	0.4588
F_AgeCat_5	Female   Age < 50	1	-0.036315294	0.097737915	0.13805527	0.7102
F_AgeCat_6	Female   Age < 55	1	-0.028386993	0.079489953	0.127530574	0.721

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PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR>CHI-SQUARE
F_AgeCat_7	Female   Age < 60	1	0.038260243	0.072838619	0.275912919	0.5994
F_AgeCat_8	Female   Age < 65	1	-0.022768042	0.067816733	0.112713943	0.7371
F_AgeCat_10	Female   Age >= 70	1	0.076551317	0.061431829	1.55281046	0.2127
F_AgeCat_11	Female   Age >= 75	1	0.035568075	0.057258001	0.385876523	0.5345
F_AgeCat_12	Female   Age >= 80	1	0.278988098	0.053304572	27.39317921	<.0001
F_AgeCat_13	Female   Age >= 85	1	0.076199113	0.05229871	2.122843025	0.1451
F_AgeCat_14	Female   Age >= 90	1	0.213007334	0.058296448	13.3507274	0.0003
ADX021_0002	DRG Craniotomy except for trauma	1	-2.332950204	0.231705473	101.3767476	<.0001
ADX021_0004	DRG Craniotomy except for trauma	1	2.070110733	0.033936136	3721.023151	<.0001
ADX044_0002	DRG Intracranial hemorrhage	1	-0.700425293	0.039960789	307.2242842	<.0001
ADX044_0003	DRG Intracranial hemorrhage	1	0.075019746	0.03402045	4.862628318	0.0274
ADX044_0004	DRG Intracranial hemorrhage	1	2.713092033	0.027761377	9550.960104	<.0001

c-statistic=0.833

**Table 15. Risk Adjustment Coefficients for IQI 17C - Acute Stroke Mortality: Stratum C: Ischemic stroke**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
Intercept	Intercept	1	-2.479381235	0.047602787	-52.08479148	<.0001
M_AgeCat_1	Male   Age < 30	1	0.372033951	0.28880033	1.288204729	0.1977
M_AgeCat_2	Male   Age < 35	1	-0.487328903	0.233741854	-2.084902186	0.0371
M_AgeCat_3	Male   Age < 40	1	-0.189582111	0.158023772	-1.199706271	0.2303
M_AgeCat_4	Male   Age < 45	1	0.157431275	0.110562618	1.423910522	0.1545
M_AgeCat_5	Male   Age < 50	1	-0.305643457	0.086738222	-3.523745913	0.0004
M_AgeCat_6	Male   Age < 55	1	-0.078833594	0.059355075	-1.32816939	0.1841
M_AgeCat_7	Male   Age < 60	1	-0.092676013	0.050711338	-1.827520569	0.0676
M_AgeCat_8	Male   Age < 65	1	0.105359689	0.051370932	2.050959286	0.0403
M_AgeCat_9	Male   Age >= 65	1	-0.010820193	0.049844594	-0.217078564	0.8281
M_AgeCat_10	Male   Age >= 70	1	0.04703378	0.045851551	1.025783841	0.305
M_AgeCat_11	Male   Age >= 75	1	0.05053187	0.04208476	1.200716613	0.2299
M_AgeCat_12	Male   Age >= 80	1	0.108161213	0.042566599	2.540987889	0.0111
M_AgeCat_13	Male   Age >= 85	1	0.257749923	0.042153064	6.11461893	<.0001
M_AgeCat_14	Male   Age >= 90	1	0.303127637	0.050399438	6.014504297	<.0001
F_AgeCat_1	Female   Age < 30	1	0.775481542	0.261420824	2.966410751	0.003
F_AgeCat_2	Female   Age < 35	1	-0.580407144	0.251615039	-2.306726757	0.0211
F_AgeCat_3	Female   Age < 40	1	-0.136949247	0.172469939	-0.794047056	0.4272
F_AgeCat_4	Female   Age < 45	1	0.008464058	0.140952007	0.060049221	0.9521
F_AgeCat_5	Female   Age < 50	1	-0.170984042	0.106105303	-1.611456137	0.1071
F_AgeCat_6	Female   Age < 55	1	-0.119168453	0.079522257	-1.49855472	0.134

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PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
F_AgeCat_7	Female   Age < 60	1	-0.038149733	0.070633594	-0.540107489	0.5891
F_AgeCat_8	Female   Age < 65	1	0.034642072	0.058896996	0.588180634	0.5564
F_AgeCat_10	Female   Age >= 70	1	0.037704159	0.048620758	0.775474527	0.4381
F_AgeCat_11	Female   Age >= 75	1	0.097136835	0.044298539	2.192777406	0.0283
F_AgeCat_12	Female   Age >= 80	1	0.130224328	0.040815685	3.190546185	0.0014
F_AgeCat_13	Female   Age >= 85	1	0.242596745	0.03608928	6.722127674	<.0001
F_AgeCat_14	Female   Age >= 90	1	0.316580389	0.034678001	9.129141699	<.0001
ADX021_0004	DRG Craniotomy except for trauma	1	2.066555084	0.142376979	14.51467159	<.0001
ADX021_1234	DRG Craniotomy except for trauma	1	-0.136622976	0.13612313	-1.003672011	0.3155
ADX024_0002	DRG Extracranial vascular procedures	1	-2.452244838	0.095129252	-25.77803137	<.0001
ADX024_0004	DRG Extracranial vascular procedures	1	1.442172015	0.043430199	33.20666369	<.0001
ADX045_0002	DRG CVA & precerebral occlusion w infarct	1	1.550554336	0.057395268	27.0153689	<.0001
ADX045_0003	DRG CVA & precerebral occlusion w infarct	1	2.708368667	0.064677547	41.87494403	<.0001
ADX045_0004	DRG CVA & precerebral occlusion w infarct	1	5.106013252	0.067309035	75.85925548	<.0001
ADX045_1234	DRG CVA & precerebral occlusion w infarct	1	-3.675853981	0.070881145	-51.85940442	<.0001
TRNSFER	Transfer from Another Acute Care Hospital	1	0.279139615	0.031467556	8.870711727	<.0001

c-statistic=0.896

Please note the sex|age groups are open-ended and overlap. The effect for any sex|age group can be estimated by summing the coefficients for all applicable sex|age groups. Confidence intervals and p-values for sex|age groups cannot be estimated with this risk model. The sex| age reference group is women age 65 and 74 years.

**Table 16. Risk Adjustment Coefficients for IQI 18 - Gastrointestinal Hemorrhage Mortality**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
Intercept	Intercept	1	-4.412442433	0.057637604	-76.55492431	<.0001
M_AgeCat_1	Male   Age < 30	1	0.810536839	0.226097857	-3.584893949	0.0003
M_AgeCat_2	Male   Age < 35	1	0.114649569	0.155720196	-0.73625369	0.4616
M_AgeCat_3	Male   Age < 40	1	-0.03398164	0.12870865	-0.26401986	0.7918
M_AgeCat_4	Male   Age < 45	1	0.241895405	0.103213601	-2.343638861	0.0191
M_AgeCat_5	Male   Age < 50	1	0.032062243	0.078565886	-0.408093696	0.6832
M_AgeCat_6	Male   Age < 55	1	0.209976408	0.062766621	-3.345351481	0.0008
M_AgeCat_7	Male   Age < 60	1	0.022443632	0.055021856	0.407903939	0.6833
M_AgeCat_8	Male   Age < 65	1	0.674645926	0.06366684	10.59650398	<.0001
M_AgeCat_9	Male   Age >= 65	1	0.307638373	0.059539303	5.166979792	<.0001
M_AgeCat_10	Male   Age >= 70	1	0.092628299	0.054986153	-1.684575012	0.0921
M_AgeCat_11	Male   Age >= 75	1	0.061185643	0.054909534	1.114299068	0.2652
M_AgeCat_12	Male   Age >= 80	1	0.166959	0.055449876	3.010989594	0.0026
M_AgeCat_13	Male   Age >= 85	1	0.175167422	0.05547079	3.157831743	0.0016

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
M_AgeCat_14	Male   Age >= 90	1	0.291393807	0.061348012	4.749849243	<.0001
F_AgeCat_1	Female   Age < 30	1	-0.2854381	0.293480389	-0.972596843	0.3308
F_AgeCat_2	Female   Age < 35	1	0.277681301	0.264204098	-1.051010578	0.2933
F_AgeCat_3	Female   Age < 40	1	0.409388583	0.189964973	-2.155074043	0.0312
F_AgeCat_4	Female   Age < 45	1	0.048401295	0.138084119	-0.350520357	0.7259
F_AgeCat_5	Female   Age < 50	1	0.006149361	0.110205681	-0.055798947	0.9555
F_AgeCat_6	Female   Age < 55	1	0.015396172	0.086980451	0.17700727	0.8595
F_AgeCat_7	Female   Age < 60	1	0.053466844	0.078229726	-0.683459425	0.4943
F_AgeCat_8	Female   Age < 65	1	0.388502951	0.071992395	5.396444342	<.0001
F_AgeCat_10	Female   Age >= 70	1	0.15748223	0.066407479	2.371453218	0.0177
F_AgeCat_11	Female   Age >= 75	1	0.01798014	0.06080539	0.29569978	0.7675
F_AgeCat_12	Female   Age >= 80	1	0.071769102	0.059954818	1.197053115	0.2313
F_AgeCat_13	Female   Age >= 85	1	0.270334197	0.05772693	4.682982431	<.0001
F_AgeCat_14	Female   Age >= 90	1	0.371862502	0.055765306	6.668348665	<.0001
ADX220_0002	DRG Major stomach, esophageal & duodenal procedures	1	1.695381861	0.202390472	-8.37678692	<.0001
ADX220_0003	DRG Major stomach, esophageal & duodenal procedures	1	-0.092676808	0.094140879	-0.984448086	0.3249
ADX220_0004	DRG Major stomach, esophageal & duodenal procedures	1	2.509768173	0.052290053	47.99704818	<.0001
ADX221_0004	DRG Major small & large bowel procedures	1	2.905031227	0.1711712	16.97149539	<.0001
ADX221_1234	DRG Major small & large bowel	1	-	0.154726353	-1.39436204	0.1632

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
	procedures		0.215744553			
ADX222_0004	DRG Other stomach, esophageal & duodenal procedures	1	2.957246792	0.175568555	16.84382944	<.0001
ADX222_1234	DRG Other stomach, esophageal & duodenal procedures	1	0.029305128	0.156800554	0.186894291	0.8517
ADX223_0004	DRG Other small & large bowel procedures	1	2.005663465	0.126075269	15.90846075	<.0001
ADX229_0002	DRG Other digestive system & abdominal procedures	1	-2.13103775	0.301328379	-7.07214421	<.0001
ADX229_0003	DRG Other digestive system & abdominal procedures	1	0.101692964	0.108955911	-0.933340496	0.3506
ADX229_0004	DRG Other digestive system & abdominal procedures	1	2.653196572	0.060287616	44.00898179	<.0001
ADX241_0003	DRG Peptic ulcer & gastritis	1	2.11212902	0.117675269	17.94879287	<.0001
ADX241_0004	DRG Peptic ulcer & gastritis	1	4.608303728	0.112375614	41.00804056	<.0001
ADX241_1234	DRG Peptic ulcer & gastritis	1	2.511739091	0.108179351	-23.21828593	<.0001
ADX242_0002	DRG Major esophageal disorders	1	2.434311871	0.399984501	-6.086015502	<.0001
ADX242_0003	DRG Major esophageal disorders	1	0.275968137	0.114643109	2.407193421	0.0161
ADX242_0004	DRG Major esophageal disorders	1	2.646881743	0.088404623	29.94053534	<.0001
ADX243_0002	DRG Other esophageal disorders	1	2.588549242	0.398584976	-6.494347251	<.0001
ADX243_0004	DRG Other esophageal disorders	1	2.084917581	0.095226392	21.89432498	<.0001
ADX244_0002	DRG Diverticulitis & diverticulosis	1	1.742324004	0.599970375	2.904016728	0.0037
ADX244_0003	DRG Diverticulitis & diverticulosis	1	3.697462077	0.572265278	6.461098064	<.0001
ADX244_0004	DRG Diverticulitis & diverticulosis	1	6.381230979	0.57075395	11.1803536	<.0001
ADX244_1234	DRG Diverticulitis & diverticulosis	1	-	0.570171377	-7.969781184	<.0001

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PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
			4.544141114			
ADX245_1234	DRG Inflammatory bowel disease	1	1.760492967	0.191703008	-9.183439455	<.0001
ADX253_0002	DRG Other & unspecified gastrointestinal hemorrhage	1	-1.206139156	0.060572201	-19.91242088	<.0001
ADX253_0003	DRG Other & unspecified gastrointestinal hemorrhage	1	0.329693321	0.044009303	7.491446101	<.0001
ADX253_0004	DRG Other & unspecified gastrointestinal hemorrhage	1	2.773671191	0.040383837	68.6827055	<.0001
ADX254_0002	DRG Other digestive system diagnoses	1	1.085507886	0.291335003	3.725978251	0.0002
ADX254_0003	DRG Other digestive system diagnoses	1	2.844219478	0.262241335	10.84580918	<.0001
ADX254_0004	DRG Other digestive system diagnoses	1	5.397932584	0.266310591	20.26931246	<.0001
ADX254_1234	DRG Other digestive system diagnoses	1	-2.958853729	0.263715537	-11.21986883	<.0001
ADX264_0004	DRG Other hepatobiliary, pancreas & abdominal procedures	1	3.217552476	0.084647512	38.01118788	<.0001
ADX279_0004	DRG Hepatic coma & other major acute liver disorders	1	2.377450754	0.345680352	6.877598743	<.0001
ADX279_1234	DRG Hepatic coma & other major acute liver disorders	1	1.645923894	0.288305078	5.708966022	<.0001
ADX280_0003	DRG Alcoholic liver disease	1	0.469477753	0.147844814	3.175476631	0.0015
ADX280_0004	DRG Alcoholic liver disease	1	3.508595673	0.084461766	41.54063813	<.0001
ADX283_0004	DRG Other disorders of the liver	1	3.212289874	0.12774824	25.14547264	<.0001
TRNSFER	Transfer from Another Acute Care Hospital	1	0.321212036	0.037246143	8.62403491	<.0001

c-statistic=0.877

Please note the sex|age groups are open-ended and overlap. The effect for any sex|age group can be estimated by summing the coefficients for all applicable sex|age groups. Confidence intervals and p-values for sex|age groups cannot be estimated with this risk model. The sex| age reference group is women age 65 and 74 years.

**Table 17. Risk Adjustment Coefficients for IQI 19 - Hip Fracture Mortality**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
Intercept	Intercept	1	2.880564152	0.178991116	-16.09333593	<.0001
M_AgeCat_9	Male   Age >= 65	1	0.482035587	0.138696942	3.475459372	0.0005
M_AgeCat_10	Male   Age >= 70	1	0.108835588	0.120145207	0.905867082	0.365
M_AgeCat_11	Male   Age >= 75	1	-0.00722157	0.099824873	-0.072342392	0.9423
M_AgeCat_12	Male   Age >= 80	1	0.306045102	0.084037885	3.641751613	0.0003
M_AgeCat_13	Male   Age >= 85	1	0.03918319	0.07340317	0.533807875	0.5935
M_AgeCat_14	Male   Age >= 90	1	0.362414759	0.064990136	5.576457944	<.0001
F_AgeCat_10	Female   Age >= 70	1	0.147994215	0.126318388	1.171596768	0.2414
F_AgeCat_11	Female   Age >= 75	1	0.219266897	0.096064406	2.282498863	0.0225
F_AgeCat_12	Female   Age >= 80	1	0.099179923	0.074477535	1.331675691	0.183
F_AgeCat_13	Female   Age >= 85	1	0.283357236	0.058950012	4.806737592	<.0001
F_AgeCat_14	Female   Age >= 90	1	0.265151786	0.047757257	5.552073167	<.0001
MDC_8	MDC 8: Musculoskeletal And Connective	1	0.204909915	0.102156051	-2.005851963	0.0449
ADX301_0003	DRG Hip joint replacement	1	1.680798649	0.097347094	17.26603818	<.0001
ADX301_0004	DRG Hip joint replacement	1	4.163792456	0.090559554	45.97850014	<.0001
ADX301_1234	DRG Hip joint replacement	1	3.572057736	0.137834287	-25.91559638	<.0001
ADX308_0003	DRG Hip and femur fracture repair	1	2.055464566	0.079103195	25.98459603	<.0001
ADX308_0004	DRG Hip and femur fracture repair	1	4.486813988	0.075874727	59.13449958	<.0001
ADX308_1234	DRG Hip and femur fracture repair	1	3.754926502	0.130017202	-28.88022861	<.0001

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PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
ADX340_0003	DRG Fracture of femur	1	1.307841468	0.080501794	16.24611577	<.0001
ADX340_0004	DRG Fracture of femur	1	3.272909851	0.085022881	38.49445963	<.0001
ADX340_1234	DRG Fracture of femur	1	-1.24151512	0.130141474	-9.539734603	<.0001
ADX912_0002	DRG Musculoskeletal & other procedures for multiple significant	1	-1.69639989	0.315993343	-5.368467176	<.0001
ADX912_0004	DRG Musculoskeletal & other procedures for multiple significant	1	2.387752379	0.155974036	15.30865295	<.0001
ADX912_1234	DRG Musculoskeletal & other procedures for multiple significant	1	1.450913791	0.185283757	-7.830766244	<.0001
ADX930_0004	DRG Multiple significant trauma w/o O.R. procedure	1	3.176091229	0.253740635	12.51707762	<.0001
ADX930_1234	DRG Multiple significant trauma w/o O.R. procedure	1	0.681900893	0.209807309	-3.250129347	0.0012
TRNSFER	Transfer from Another Acute Care Hospital	1	0.078324471	0.062956701	1.244100622	0.2135

c-statistic=0.902

Please note the sex|age groups are open-ended and overlap. The effect for any sex|age group can be estimated by summing the coefficients for all applicable sex|age groups. Confidence intervals and p-values for sex|age groups cannot be estimated with this risk model. The sex| age reference group is women age 65 and 74 years.

**Table 18. Risk Adjustment Coefficients for IQI 20 - Pneumonia Mortality**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
Intercept	Intercept	1	-4.54495303	0.047861449	-94.96062342	<.0001
M_AgeCat_1	Male   Age < 30	1	0.026791982	0.196651631	-0.136240831	0.8916
M_AgeCat_2	Male   Age < 35	1	0.085329159	0.201201805	-0.424097382	0.6715
M_AgeCat_3	Male   Age < 40	1	0.277112571	0.1707633	-1.622787626	0.1046
M_AgeCat_4	Male   Age < 45	1	0.127853129	0.136838546	-0.934335633	0.3501
M_AgeCat_5	Male   Age < 50	1	0.264807969	0.105540597	-2.509062637	0.0121
M_AgeCat_6	Male   Age < 55	1	0.214120163	0.075326823	-2.842548683	0.0045
M_AgeCat_7	Male   Age < 60	1	0.243204318	0.061987018	-3.923471802	<.0001
M_AgeCat_8	Male   Age < 65	1	0.305197611	0.054189491	5.632044202	<.0001
M_AgeCat_9	Male   Age >= 65	1	0.29373863	0.049261674	5.962822704	<.0001
M_AgeCat_10	Male   Age >= 70	1	0.049591007	0.044677335	1.109981299	0.267
M_AgeCat_11	Male   Age >= 75	1	0.147390267	0.040660742	3.624878906	0.0003
M_AgeCat_12	Male   Age >= 80	1	0.131095957	0.040205182	3.260673111	0.0011
M_AgeCat_13	Male   Age >= 85	1	0.213547595	0.039417341	5.417605254	<.0001
M_AgeCat_14	Male   Age >= 90	1	0.223468837	0.041771829	5.349749858	<.0001
F_AgeCat_1	Female   Age < 30	1	0.221905899	0.217750324	-1.019084126	0.3082
F_AgeCat_2	Female   Age < 35	1	-0.12733643	0.222702171	-0.571779021	0.5675

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PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
F_AgeCat_3	Female   Age < 40	1	0.187281841	0.185415929	-1.010063387	0.3125
F_AgeCat_4	Female   Age < 45	1	0.227139898	0.135815413	-1.672416214	0.0944
F_AgeCat_5	Female   Age < 50	1	0.175159646	0.10366291	-1.68970412	0.0911
F_AgeCat_6	Female   Age < 55	1	0.209089187	0.078785393	-2.653908017	0.008
F_AgeCat_7	Female   Age < 60	1	0.156310891	0.064900869	-2.408456051	0.016
F_AgeCat_8	Female   Age < 65	1	0.075030264	0.057379453	1.307615544	0.191
F_AgeCat_10	Female   Age >= 70	1	0.141666971	0.049309536	2.873013641	0.0041
F_AgeCat_11	Female   Age >= 75	1	0.21900237	0.04475219	4.893668271	<.0001
F_AgeCat_12	Female   Age >= 80	1	0.13787087	0.04211328	3.27380983	0.0011
F_AgeCat_13	Female   Age >= 85	1	0.247532128	0.03810991	6.495216846	<.0001
F_AgeCat_14	Female   Age >= 90	1	0.321208378	0.036625494	8.770076358	<.0001
ADX120_0004	DRG Major respiratory & chest procedures	1	2.274561224	0.238783504	9.525621289	<.0001
ADX120_1234	DRG Major respiratory & chest procedures	1	0.006288967	0.215826116	-0.029139043	0.9768
ADX121_0004	DRG Other respiratory & chest procedures	1	3.015659244	0.097093951	31.05918754	<.0001
ADX130_0003	DRG Respiratory system diagnosis w ventilator support 96+ ho	1	2.911720834	0.064747912	44.97011167	<.0001
ADX130_0004	DRG Respiratory system diagnosis w ventilator support 96+ ho	1	4.127805758	0.053184986	77.61223797	<.0001
ADX137_0002	DRG Major respiratory infections & inflammations	1	1.460364495	0.138031402	-10.57994393	<.0001
ADX137_0003	DRG Major respiratory infections & inflammations	1	0.546682227	0.052390991	10.434661	<.0001

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PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
ADX137_0004	DRG Major respiratory infections & inflammations	1	2.0033026	0.048673544	41.15793589	<.0001
ADX139_0002	DRG Other pneumonia	1	-0.853861535	0.048266701	-17.69048891	<.0001
ADX139_0003	DRG Other pneumonia	1	0.454318901	0.037971308	11.96479456	<.0001
ADX139_0004	DRG Other pneumonia	1	2.062455092	0.037370929	55.18875686	<.0001
TRNSFER	Transfer from Another Acute Care Hospital	1	0.522192625	0.041242287	12.66158253	<.0001

c-statistic=0.817

**Table 19. Risk Adjustment Coefficients for IQI 30 - PTCA Mortality**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS	
Intercept	Intercept	1	2.645239613	-	0.055804208	-47.40215316	<.0001
M_AgeCat_4	Male   Age < 45	1	0.205291649	0.125914437	-1.630405959	0.103	
M_AgeCat_5	Male   Age < 50	1	0.052390947	0.080262797	0.652742609	0.5139	
M_AgeCat_6	Male   Age < 55	1	0.200910038	0.063626596	-3.157642425	0.0016	
M_AgeCat_7	Male   Age < 60	1	0.073345906	0.052336211	-1.401437075	0.1611	
M_AgeCat_8	Male   Age < 65	1	0.009937092	0.057637452	0.172406864	0.8631	
M_AgeCat_9	Male   Age >= 65	1	0.032158421	0.056544453	0.568728126	0.5695	
M_AgeCat_10	Male   Age >= 70	1	0.031751636	0.046675704	0.680260463	0.4963	
M_AgeCat_11	Male   Age >= 75	1	0.108650314	0.047819926	2.27207201	0.0231	
M_AgeCat_12	Male   Age >= 80	1	0.086146997	0.052486765	1.64130895	0.1007	
M_AgeCat_13	Male   Age >= 85	1	0.202608645	0.061436603	3.297849094	0.001	
M_AgeCat_14	Male   Age >= 90	1	0.23622641	0.088756036	2.661525017	0.0078	
F_AgeCat_4	Female   Age < 45	1	0.202001139	0.163082414	1.238644527	0.2155	
F_AgeCat_5	Female   Age < 50	1	0.176714469	0.137968433	1.280832617	0.2003	
F_AgeCat_6	Female   Age < 55	1	0.333136314	0.101107022	-3.294888001	0.001	
F_AgeCat_7	Female   Age < 60	1	0.007825935	0.080917054	0.096715521	0.923	
F_AgeCat_8	Female   Age < 65	1	0.000950748	0.070545849	-0.013477028	0.9892	
F_AgeCat_10	Female   Age >= 70	1	0.048864599	0.061329043	0.796761154	0.4256	

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PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
F_AgeCat_11	Female   Age >= 75	1	0.163217461	0.058634813	2.783627225	0.0054
F_AgeCat_12	Female   Age >= 80	1	0.13738567	0.059081033	2.325376902	0.0201
F_AgeCat_13	Female   Age >= 85	1	0.25305503	0.064302506	3.935383652	<.0001
F_AgeCat_14	Female   Age >= 90	1	0.168884872	0.08641732	1.954294255	0.0507
ADX161_0004	DRG Cardiac defibrillator & heart assist implant	1	1.38058088	0.073208034	18.85832485	<.0001
ADX165_0002	DRG Coronary bypass w AMI or complex PDX	1	-3.036372731	0.489217545	-6.206590021	<.0001
ADX165_0004	DRG Coronary bypass w AMI or complex PDX	1	0.758514565	0.092038602	8.241265577	<.0001
ADX167_0004	DRG Other cardiothoracic & thoracic vascular procedures	1	1.765880063	0.102588039	17.21331338	<.0001
ADX169_0004	DRG Major abdominal vascular procedures	1	2.224487521	0.057564548	38.64335923	<.0001
ADX174_0003	DRG Percutaneous coronary intervention w AMI	1	2.093131134	0.064036982	32.68628642	<.0001
ADX174_0004	DRG Percutaneous coronary intervention w AMI	1	4.748158356	0.056989696	83.31608561	<.0001
ADX174_1234	DRG Percutaneous coronary intervention w AMI	1	-3.551452286	0.06530255	-54.38458781	<.0001
ADX175_0002	DRG Percutaneous coronary intervention w/o AMI	1	1.013309514	0.289100256	3.505045375	0.0005
ADX175_0003	DRG Percutaneous coronary intervention w/o AMI	1	2.973929779	0.256904442	11.57601539	<.0001
ADX175_0004	DRG Percutaneous coronary intervention w/o AMI	1	6.100723295	0.24766024	24.63343849	<.0001
ADX175_1234	DRG Percutaneous coronary intervention w/o AMI	1	-5.608035486	0.249104194	-22.51281042	<.0001
ADX710_0004	DRG Infectious & parasitic diseases including HIV w O.R. pro	1	0.754442787	0.063285981	11.92116757	<.0001

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c-statistic=0.928

**Table 20. Risk Adjustment Coefficients for IQI 31 - Carotid Endarterectomy Mortality**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
Intercept	Intercept	1	-	0.271201695	-15.19192122	<.0001
M_AgeCat_5	Male   Age < 50	1	0.738643793	1.41241643	0.5229646	0.601
M_AgeCat_6	Male   Age < 55	1	-	1.085423483	-1.48046119	0.1388
M_AgeCat_7	Male   Age < 60	1	0.169229771	0.453827746	0.37289428	0.7092
M_AgeCat_8	Male   Age < 65	1	0.211753781	0.390052498	-0.542885334	0.5872
M_AgeCat_9	Male   Age >= 65	1	-	0.285579078	-0.05512663	0.956
M_AgeCat_10	Male   Age >= 70	1	0.490363367	0.287952927	-1.702928923	0.0886
M_AgeCat_11	Male   Age >= 75	1	0.466386307	0.283157621	1.647090779	0.0995
M_AgeCat_12	Male   Age >= 80	1	-0.03409513	0.275570173	-0.123725764	0.9015
M_AgeCat_13	Male   Age >= 85	1	0.27371001	0.336982148	0.812238902	0.4167
M_AgeCat_14	Male   Age >= 90	1	-0.00583903	0.663457878	-0.008800905	0.993
F_AgeCat_5	Female   Age < 50	1	0.65058833	0.882170052	0.737486303	0.4608
F_AgeCat_6	Female   Age < 55	1	0.197679084	0.826414103	0.239201005	0.8109
F_AgeCat_7	Female   Age < 60	1	-0.25465999	0.559485676	-0.455168024	0.649
F_AgeCat_8	Female   Age < 65	1	-	0.395750456	-0.315248226	0.7526
F_AgeCat_10	Female   Age >= 70	1	0.181230966	0.283984749	0.638171474	0.5234
F_AgeCat_11	Female   Age >= 75	1	-0.37189073	0.283690143	-1.310904661	0.1899
F_AgeCat_12	Female   Age >= 80	1	-	0.365200626	-0.595296833	0.5516

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
F_AgeCat_13	Female   Age >= 85	1	0.327774679	0.475538164	0.689271028	0.4907
F_AgeCat_14	Female   Age >= 90	1	0.510536958	0.65078588	0.784492986	0.4328
MDC_18	MDC 18: Infectious and Parasitic	1	1.363296608	0.627585678	2.172287633	0.0298
ADX021_0004	DRG Craniotomy except for trauma	1	3.476701269	0.373927744	9.297789014	<.0001
ADX024_0002	DRG Extracranial vascular procedures	1	1.774420297	0.485367303	3.6558299	0.0003
ADX024_0003	DRG Extracranial vascular procedures	1	3.351397634	0.50391866	6.650671828	<.0001
ADX024_0004	DRG Extracranial vascular procedures	1	6.697882588	0.462600598	14.47875902	<.0001
ADX024_1234	DRG Extracranial vascular procedures	1	4.700139123	0.476517749	-9.86351324	<.0001
ADX163_0004	DRG Cardiac valve procedures w/o AMI or complex PDX	1	2.771951305	0.433617859	6.392613335	<.0001
ADX165_0004	DRG Coronary bypass w AMI or complex PDX	1	1.799246839	0.373730775	4.814286001	<.0001
ADX166_0002	DRG Coronary bypass w/o AMI or complex PDX	1	1.372158708	1.010011168	-1.358557956	0.1743
ADX166_0004	DRG Coronary bypass w/o AMI or complex PDX	1	2.074140182	0.324780348	6.386285986	<.0001
ADX182_0004	DRG Other peripheral vascular procedures #	1	2.388985606	0.414709892	5.760618807	<.0001
ADX710_0004	DRG Infectious & parasitic diseases including HIV w O.R. pro	1	0.58400899	0.798701412	0.731198143	0.4647
TRNSFER	Transfer from Another Acute Care Hospital	1	0.202158346	0.202114671	1.000216092	0.3172

c-statistic=0.949

**Table 21. Risk Adjustment Coefficients for IQI 32 - AMI Mortality without Transfer**

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
Intercept	Intercept	1	-4.668662118	0.050027937	-93.32110087	<.0001
M_AgeCat_1	Male   Age < 30	1	-0.249178797	0.307324638	-0.810799937	0.4175
M_AgeCat_2	Male   Age < 35	1	0.167454224	0.219856578	0.761652098	0.4463
M_AgeCat_3	Male   Age < 40	1	-0.074533403	0.15242787	-0.488974905	0.6249
M_AgeCat_4	Male   Age < 45	1	-0.25845384	0.100648429	-2.567887476	0.0102
M_AgeCat_5	Male   Age < 50	1	0.034235381	0.069482679	0.492718204	0.6222
M_AgeCat_6	Male   Age < 55	1	-0.157714774	0.052358738	-3.012195855	0.0026
M_AgeCat_7	Male   Age < 60	1	-0.102772282	0.043531616	-2.360865302	0.0182
M_AgeCat_8	Male   Age < 65	1	0.04007391	0.044034146	0.910064441	0.3628
M_AgeCat_9	Male   Age >= 65	1	0.091788849	0.043340059	2.117875522	0.0342
M_AgeCat_10	Male   Age >= 70	1	0.106168092	0.037542327	2.827957151	0.0047
M_AgeCat_11	Male   Age >= 75	1	0.07638136	0.038233813	1.99774372	0.0457
M_AgeCat_12	Male   Age >= 80	1	0.041091491	0.038636459	1.063541865	0.2875
M_AgeCat_13	Male   Age >= 85	1	0.200594258	0.039942795	5.022038562	<.0001
M_AgeCat_14	Male   Age >= 90	1	0.173721755	0.044101905	3.939098624	<.0001
F_AgeCat_1	Female   Age < 30	1	-1.396100631	0.675610682	-2.066427704	0.0388
F_AgeCat_2	Female   Age < 35	1	-0.110369904	0.250426917	-0.440727	0.6594
F_AgeCat_3	Female   Age < 40	1	0.290573391	0.194830241	1.49141832	0.1359
F_AgeCat_4	Female   Age < 45	1	0.005626008	0.139415753	0.040354178	0.9678
F_AgeCat_5	Female   Age < 50	1	0.05622444	0.1058998	0.530921119	0.5955
F_AgeCat_6	Female   Age < 55	1	-0.22423092	0.081604553	-2.747774641	0.006

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PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
F_AgeCat_7	Female   Age < 60	1	-0.094295571	0.062795982	-1.501617911	0.1332
F_AgeCat_8	Female   Age < 65	1	-0.001474425	0.054612159	-0.026998112	0.9785
F_AgeCat_10	Female   Age >= 70	1	0.076392406	0.048791434	1.565692984	0.1174
F_AgeCat_11	Female   Age >= 75	1	0.056261302	0.046392099	1.212734566	0.2252
F_AgeCat_12	Female   Age >= 80	1	0.106358047	0.042096147	2.526550629	0.0115
F_AgeCat_13	Female   Age >= 85	1	0.158368815	0.039109073	4.049413655	<.0001
F_AgeCat_14	Female   Age >= 90	1	0.175929502	0.038890403	4.523725333	<.0001
ADX161_0004	DRG Cardiac defibrillator & heart assist implant	1	3.249719868	0.076874204	42.27321641	<.0001
ADX162_0004	DRG Cardiac valve procedures w AMI or complex PDX	1	2.890936971	0.106730199	27.08640106	<.0001
ADX165_0002	DRG Coronary bypass w AMI or complex PDX	1	-1.294525573	0.16073326	-8.053874933	<.0001
ADX165_0004	DRG Coronary bypass w AMI or complex PDX	1	2.389695092	0.057277185	41.72158796	<.0001
ADX167_0004	DRG Other cardiothoracic & thoracic vascular procedures	1	3.995461079	0.10465913	38.17594385	<.0001
ADX169_0004	DRG Major abdominal vascular procedures	1	2.016438706	0.125188222	16.10725577	<.0001
ADX169_1234	DRG Major abdominal vascular procedures	1	2.54193045	0.112110442	22.67344954	<.0001
ADX174_0002	DRG Percutaneous coronary intervention w AMI	1	-0.974081501	0.073192431	-13.3085004	<.0001
ADX174_0003	DRG Percutaneous coronary intervention w AMI	1	0.624232041	0.056394714	11.06898135	<.0001
ADX174_0004	DRG Percutaneous coronary intervention w AMI	1	3.239491133	0.042743236	75.7895613	<.0001
ADX181_0004	DRG Lower extremity arterial procedures #	1	3.23881078	0.31635183	10.23800236	<.0001

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	Z-STATISTICS	PROB Z-STAISTICS
ADX181_1234	DRG Lower extremity arterial procedures #	1	1.478061155	0.291787389	5.065541597	<.0001
ADX182_0004	DRG Other peripheral vascular procedures #	1	3.122494861	0.242722894	12.86444312	<.0001
ADX182_1234	DRG Other peripheral vascular procedures #	1	1.573680334	0.221879262	7.092507509	<.0001
ADX190_0002	DRG Acute myocardial infarction	1	0.014484493	0.059874343	0.241914856	0.8088
ADX190_0003	DRG Acute myocardial infarction	1	1.467395941	0.044489672	32.98284488	<.0001
ADX190_0004	DRG Acute myocardial infarction	1	3.553300356	0.042821637	82.97908736	<.0001

c-statistic=0.877

Please note the sex|age groups are open-ended and overlap. The effect for any sex|age group can be estimated by summing the coefficients for all applicable sex|age groups. Confidence intervals and p-values for sex|age groups cannot be estimated with this risk model. The sex| age reference group is women age 65 and 74 years.

**Composite Weights**

Under the Hospital Inpatient Quality Reporting (IQR) program, the Centers for Medicare & Medicaid Services (CMS) adopted IQI developed by AHRQ for use in “Hospital Compare”, a comparative public report of hospital performance. Two of the adopted indicators are composite measures: IQI #90 and IQI #91.

**Table 26. Denominator Weights for IQI 90**

INDICATOR	WEIGHT
IQI 08 Esophageal Resection Mortality Rate	0.004720422547
IQI 09 Pancreatic Resection Mortality Rate	0.023919897144
IQI 11 Abdominal Aortic Aneurism (AAA) Repair Mortality Rate	0.049330732798
IQI 12 Coronary Artery Bypass Graft (CABG) Mortality Rate	0.249623624093
IQI 30 Percutaneous Coronary Intervention (PCI) Mortality Rate	0.577623475793
IQI 31 Carotid Endarterectomy Mortality Rate	0.094781847625
SUM	1.0000000

**Table 27. Denominator Weights for IQI 91**

INDICATOR	WEIGHT
IQI 15 Acute Myocardial Infarction (AMI) MortalityRate	0.158595461374
IQI 16 Heart Failure MortalityRate	0.275870084060
IQI 17 Acute Stroke MortalityRate	0.163057036927
IQI 18 Gastrointestinal Hemorrhage MortalityRate	0.144193260814
IQI 19 Hip Fracture MortalityRate	0.071361182840
IQI 20 Pneumonia Mortality Rate	0.186922973985
SUM	1.0000000

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**Table A.1. Population Age Categories**

<b>POPCAT</b>	<b>AGE RANGE</b>
1	low - 4
2	5 - 9
3	10 - 14
4	15 - 17
5	18 - 24
6	25 - 29
7	30 - 34
8	35 - 39
9	40 - 44
10	45 - 49
11	50 - 54
12	55 - 59
13	60 - 64
14	65 - 69
15	70 - 74
16	75 - 79
17	80 - 84
18	85 - high

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**Table A.2. Major Diagnostic Categories (MDC)**

MDC	DESCRIPTION
1	DISEASES & DISORDERS OF THE NERVOUS SYSTEM
2	DISEASES & DISORDERS OF THE EYE
3	DISEASES & DISORDERS OF THE EAR, NOSE, MOUTH & THROAT
4	DISEASES & DISORDERS OF THE RESPIRATORY SYSTEM
5	DISEASES & DISORDERS OF THE CIRCULATORY SYSTEM
6	DISEASES & DISORDERS OF THE DIGESTIVE SYSTEM
7	DISEASES & DISORDERS OF THE HEPATOBILIARY SYSTEM & PANCREAS
8	DISEASES & DISORDERS OF THE MUSCULOSKELETAL SYSTEM & CONN TISSUE
9	DISEASES & DISORDERS OF THE SKIN, SUBCUTANEOUS TISSUE & BREAST
10	ENDOCRINE, NUTRITIONAL & METABOLIC DISEASES & DISORDERS
11	DISEASES & DISORDERS OF THE KIDNEY & URINARY TRACT
12	DISEASES & DISORDERS OF THE MALE REPRODUCTIVE SYSTEM
13	DISEASES & DISORDERS OF THE FEMALE REPRODUCTIVE SYSTEM
14	PREGNANCY, CHILDBIRTH & THE PUEPERIUM
15	NEWBORNS & OTHER NEONATES WITH CONDTN ORIG IN PERINATAL PERIOD
16	DISEASES & DISORDERS OF BLOOD, BLOOD FORMING ORGANS, IMMUNOLOGDISORD
17	MYELOPROLIFERATIVE DISEASES & DISORDERS, POORLY DIFFERENTIATED NEOPLASM
18	INFECTIOUS & PARASITIC DISEASES, SYSTEMIC OR UNSPECIFIED SITES
19	MENTAL DISEASES & DISORDERS
20	20 ALCOHOL/DRUG USE & ALCOHOL/DRUG INDUCED ORGANIC MENTAL DISORDERS
21	INJURIES, POISONINGS & TOXIC EFFECTS OF DRUGS
22	BURNS
23	FACTORS INFLUENCING HLTH STAT & OTHR CONTACTS WITH HLTH SERVCS
24	MULTIPLE SIGNIFICANT TRAUMA
25	HUMAN IMMUNODEFICIENCY VIRUS INFECTIONS
26	OTHER REPRESENTS ALL OTHER MDCs NOT EXPLICITLY INCLUDED AS A PARAMETER IN THE QI RISK ADJUSTMENT MODEL

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**Table A.3. Categorical Variable Definitions: Transfer, Point of Origin**

CATEGORY	DESCRIPTION	DEFINITION
TRNSFER	Transfer-in	If admission type (ATYPE) not equal to '4' (newborn) and - admission source (ASOURCE) equal to '2' (Another Hospital) or - point of origin (POINTOFORIGINUB04) equal to '4' (Transfer from a Hospital), then TRNSFER=1
NOPOUB04	UB-04 Point-ofOrigin Data Not Available	If admission source (ASOURCE) is not equal to missing and point of origin(POINTOFORIGINUB04) is equal to missing, then NOPOUB04=1
NOPRDAY	Procedure Days Data Not Available	If PRDAY1 and PRDAY2 and . . . PRDAYn is equal to missing, where n is the number of Procedure Codes reported in the user's data – then NOPRDAY = 1
RUPTURED	AAA Repair	If ICD-9-CM diagnosis code 441.3 Abdominal aneurysm, ruptured is present in the record, then RUPTURED=1